

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

PUBLICATION NUMBER : 60018614  
 PUBLICATION DATE : 30-01-85

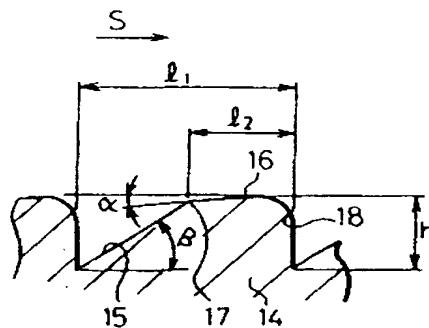
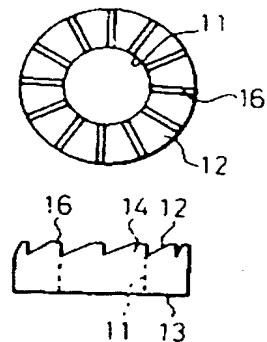
APPLICATION DATE : 31-05-84  
 APPLICATION NUMBER : 59109330

APPLICANT : TAIHO KOGYO CO LTD;

INVENTOR : SUGIURA HIDEKIYO;

INT.CL. : F16C 17/04

TITLE : TAPERED LAND THRUST BEARING



**ABSTRACT :** PURPOSE: To make an oil film break of lubricating oil so as not to happen there as well as to prevent the occurrence of cavitation erosion, by removing an angular end in a corner angle of a tapered land end part and thereby forming it into a smooth spherical form.

**CONSTITUTION:** Plural tapered lands 14 being successively made up in the circumferential direction of a sliding bearing surface 12 are provided with an inclined plane 15 having a rising gradient to a sliding direction S of a rotary shaft and a gentle inclined plane 16 consisting of a relatively slow grade successive to this inclined plane 15. The inclined plane 15 has a tilt angle  $\alpha$  against a horizontal line perpendicular to a bearing center line, while the tilt angle  $\beta$  is formed so as to become almost constant at each tapered land 14 in common. And, a corner angle part in a boundary part 17 between the inclined plane 15 and gentle inclined plane 16 is formed into the corner angle part carrying a roundness of  $40\text{--}50\mu$  or so in radius, and likewise an end part 18 of each tapered land 14 is formed into the corner angle part carrying a roundness of  $5\text{--}10\mu$  or so in radius.

COPYRIGHT: (C)1985,JPO&Japio